

Chowchilla Subbasin 2022 Groundwater Sustainability Plan Annual Report

Chowchilla Subbasin GSP Advisory Committee Special Meeting of the Advisory Committee

March 23, 2022

1:30pm – 3:30pm

Virtual Meeting

Agenda

1. Groundwater Sustainability Plan (GSP) Annual Report Requirements
2. 2021 Surface Water System Water Budget
3. Groundwater Sustainability Agency (GSA) Project Summary
4. Groundwater Conditions
5. Questions

GSP Annual Report Requirements

- California Code of Regulations Title 23 (23 CCR) § 356.2 requires that annual reports be submitted to the California Department of Water Resources (DWR) by April 1 of each year following the adoption of the GSP
- Annual Report shall include the following general components for the preceding water year (WY):
 - Surface Water System Water Budget
 - GSA Project Summary
 - Groundwater Conditions

2021 Surface Water System Water Budget

- WY 2021
 - October 2020 → September 2021
 - “Critical” year type
- Water Budget Reporting Requirements:
 - Groundwater Extraction
 - Surface Water Supplies (Used or Available for Use)
 - Total Water Use

2021 Surface Water System Budget (Cont.....)

- Groundwater Extraction: 374,360 AF (average critical water year 331,180 AF)
 - Agriculture: 364,430 AF (97%)
 - Urban: 9,930 AF (3%)
- Recharge: 102,600 AF (average critical water year 139,400 AF)
 - Infiltration (Deep Percolation) of Applied Water: 76,200 AF
 - Infiltration (Deep Percolation) of Precipitation: 5,400 AF
 - Infiltration of Surface Water (Seepage): 21,000 AF

2021 Surface Water System Budget (Cont.....)

- Total surface water supplies: 17,000 AF (average critical year 62,100 AF)
 - Buchanan Release 6,413 AF
 - Madera Canal Release 10,398 AF
 - Madera Canal Flood Release 0 AF
 - Buchanan Dam Flood Release 0 AF
 - Local imported supplies (TTWD water purchase) 0 AF

2021 Surface Water System Budget (Cont.....)

- Total water use: 404,610 AF (average critical water year 463,710 AF)
 - Surface water 3%
 - Groundwater 93%
 - Precipitation 4%
- Total consumptive water use: 323,920 AF (average critical water year 346,740 AF)

GSA Project Summary

- Chowchilla Water District (CWD) GSA
 - 3 recharge basins
 - Road 19 Groundwater Recharge Basin
 - Wood Groundwater Recharge Basin
 - Accondero Groundwater Recharge Basin
 - FloodMAR through use of CWD's existing irrigation conveyance infrastructure
 - Enhanced Management of Flood Releases
 - Potential increase in capacity of Eastman Lake
 - Land Fallowing Program
 - No recharge (dedicated recharge basin, FloodMAR, etc.) in 2021

GSA Project Summary (Cont.....)

- Madera County GSA
 - Rate Studies
 - Recharge Projects
 - 2021 Prop 68
 - February 2022 Spending Plan
 - Demand Management
 - Water Market Study
 - Sustainable Agricultural Lands Conservation (SALC) Study
 - Allocation Framework
 - Demand Measurement Program
 - Additional Roles

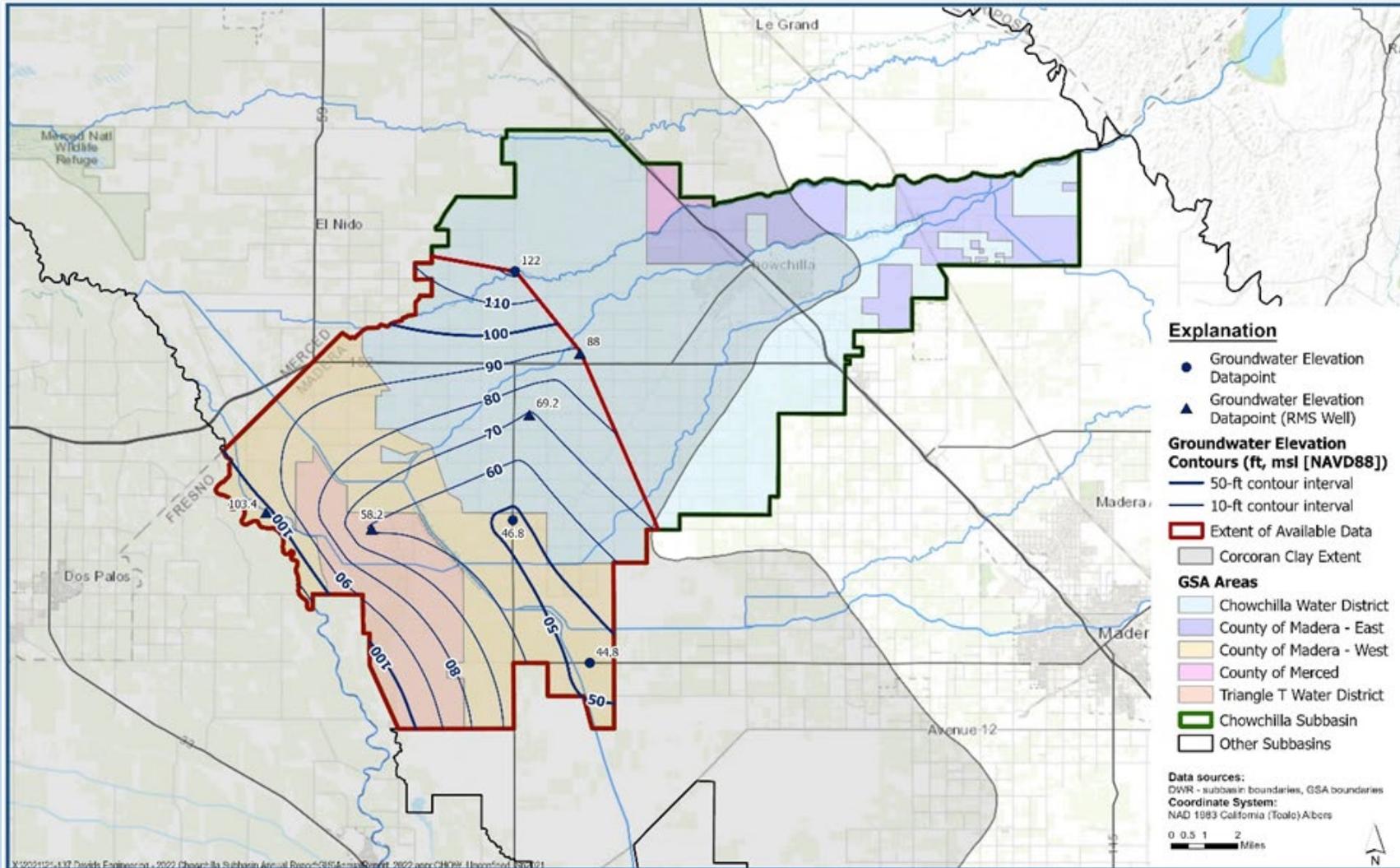
GSA Project Summary (Cont.....)

- Sierra Vista Mutual Water Company
 - Development of up to 300 acres of dedicated groundwater recharge basins
 - February 2022 Spending Plan

GSA Project Summary (Cont.....)

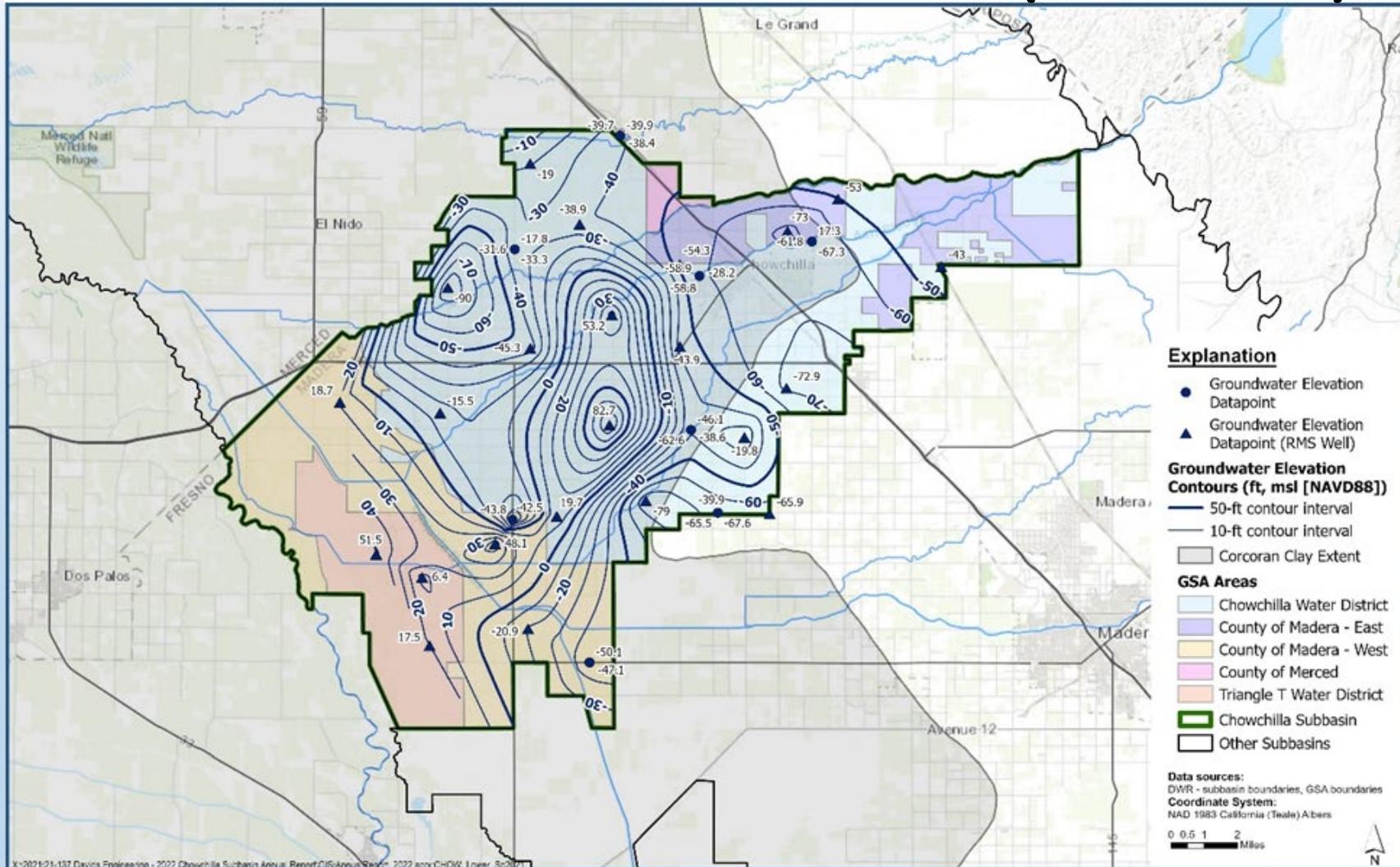
- Triangle T Water District GSA
 - 508 acres of existing dedicated groundwater recharge basins
 - Development of up to 310 acres of dedicated groundwater recharge basins
 - Water Conveyance Pipelines
 - Columbia Canal Pipeline
 - Poso Canal Pipeline
 - February 2022 Spending Plan
 - Nested monitoring wells

Groundwater Conditions



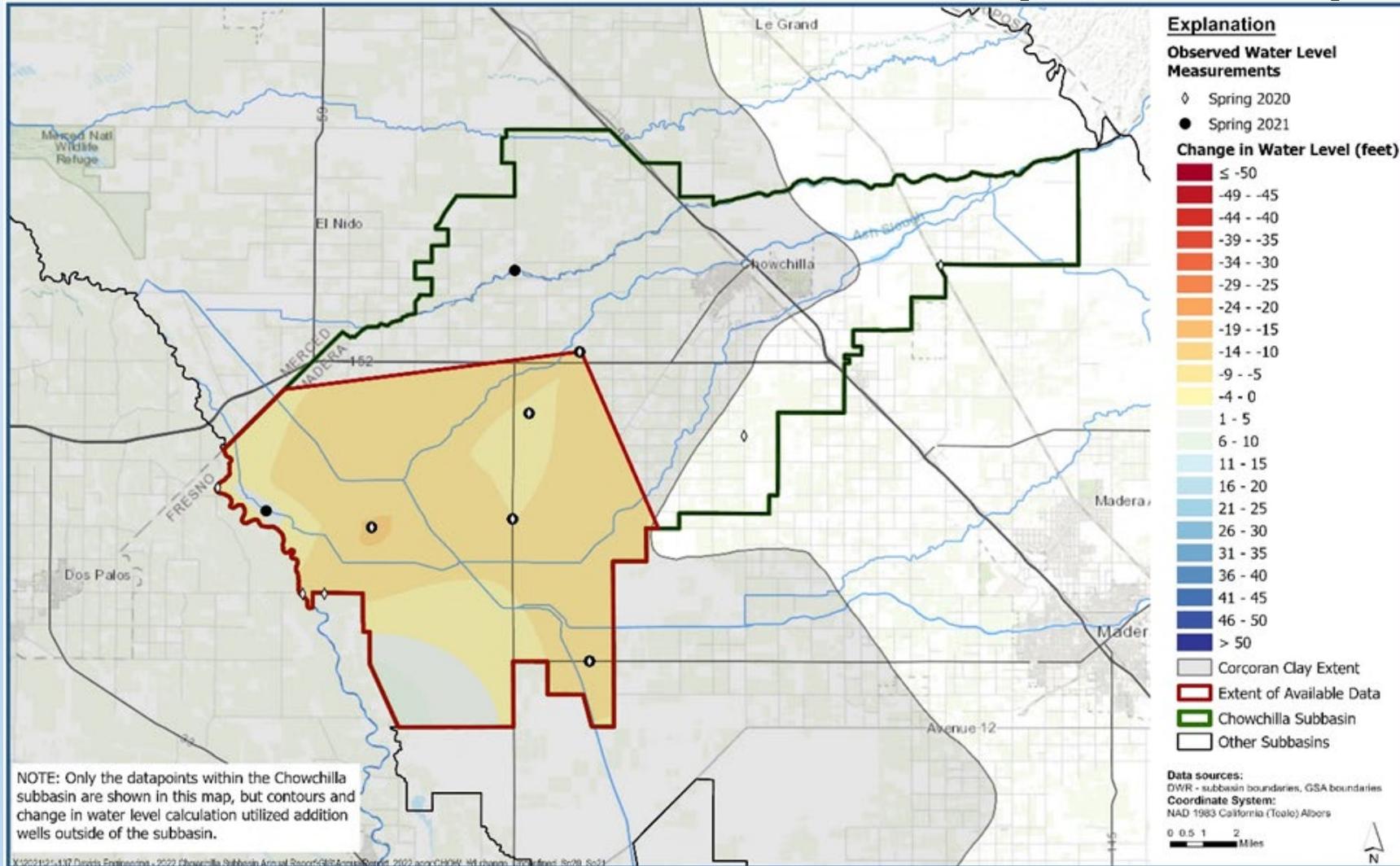
Spring 2021 GW Contours – Upper Aquifer

Groundwater Conditions (Cont.....)



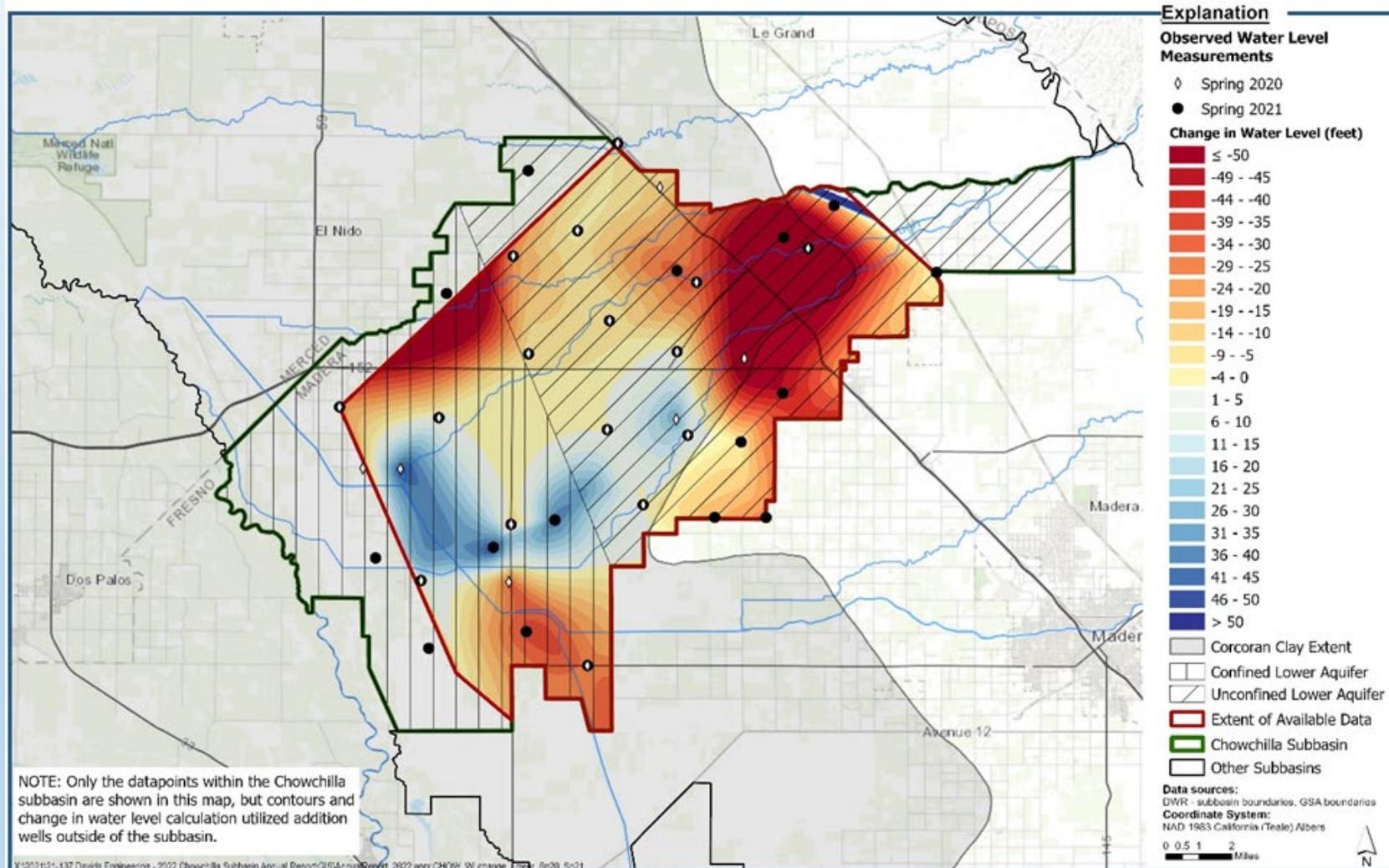
Spring 2021 GW Contours – Lower Aquifer

Groundwater Conditions (Cont.....)



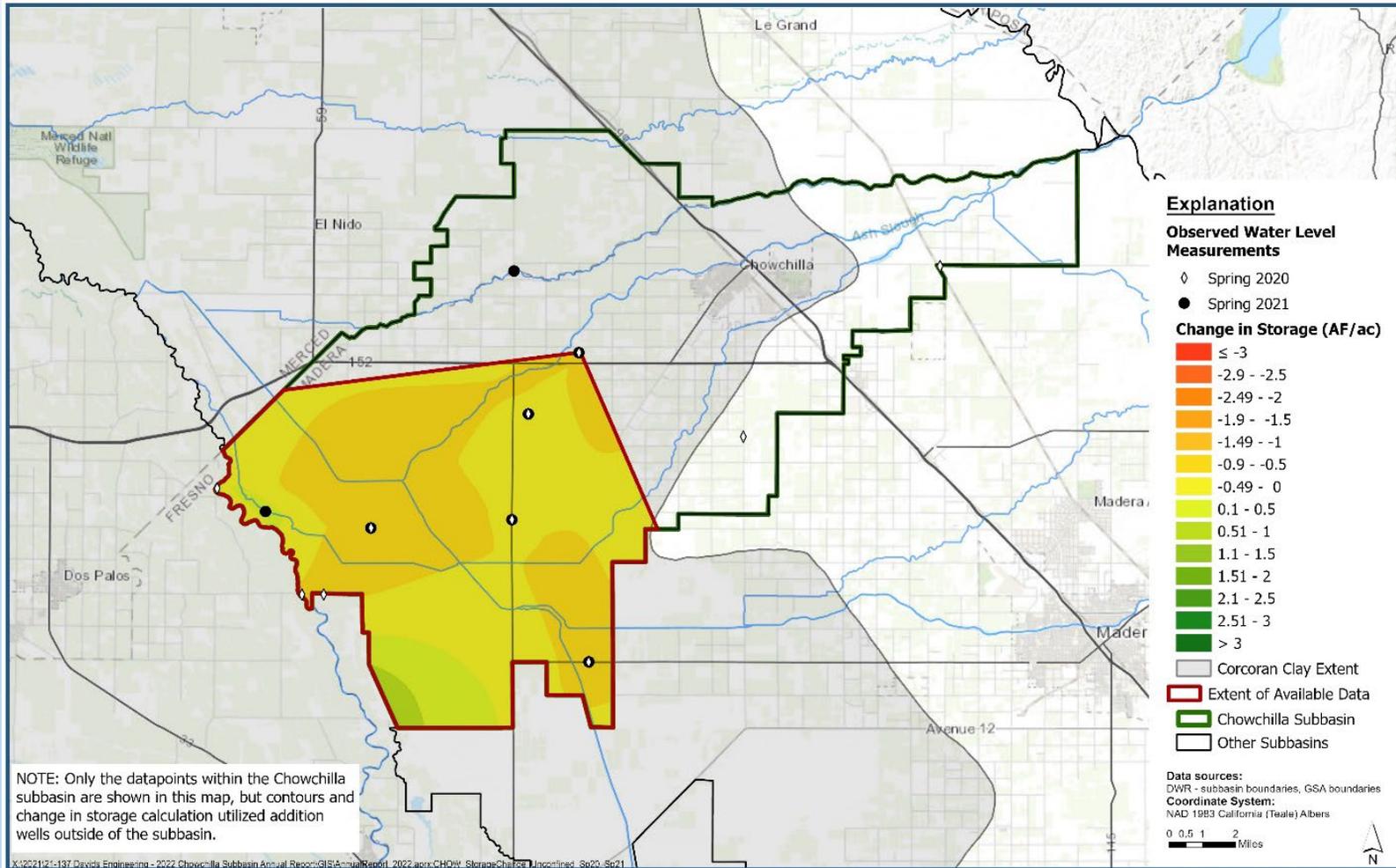
Spring 2020-2021 GW Level Change – Upper Aquifer

Groundwater Conditions (Cont....)



Spring 2020-2021 GW Level Change – Lower Aquifer

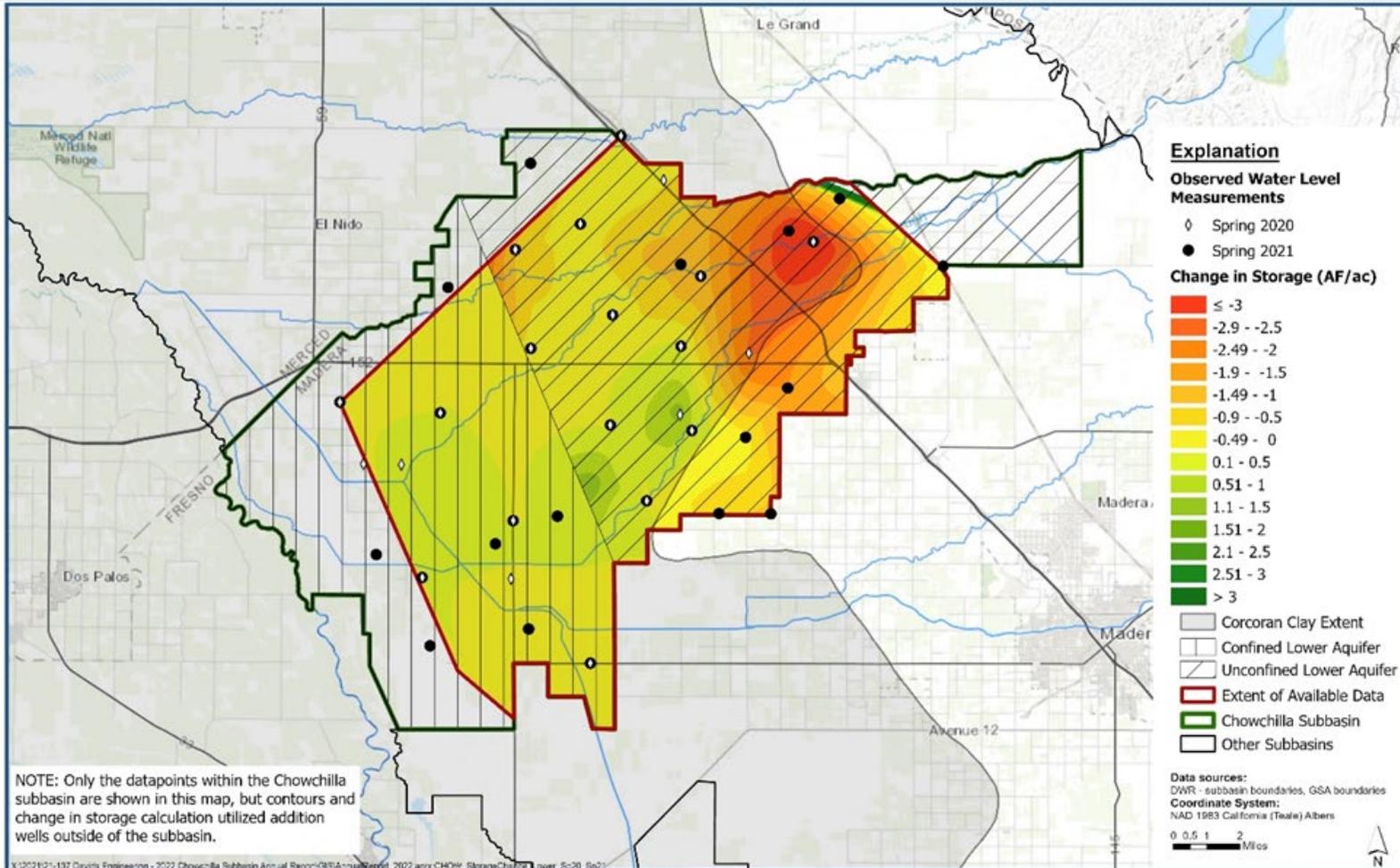
Groundwater Conditions (Cont....)



Total GW Storage change for Upper Aquifer is about -27,400 AF.

Spring 2020-2021 GW Storage Change – Upper Aquifer

Groundwater Conditions (Cont....)

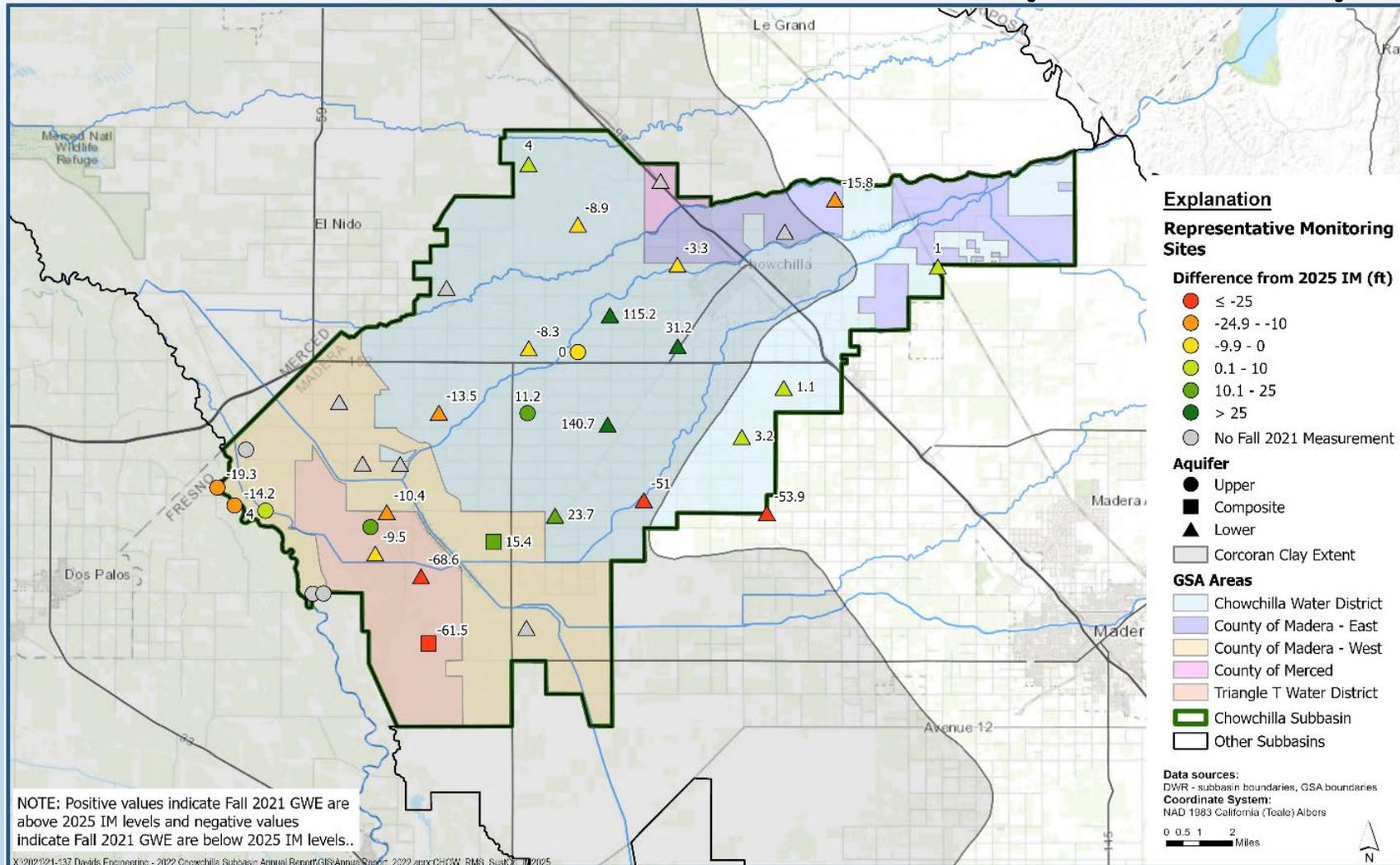


Total GW Storage change for Lower Aquifer is about -77,000 AF. Calculation from mapped area was extended to unmapped areas.

Total combined GW storage change is about -104,000 AF for Spring 2020 to Spring 2021.

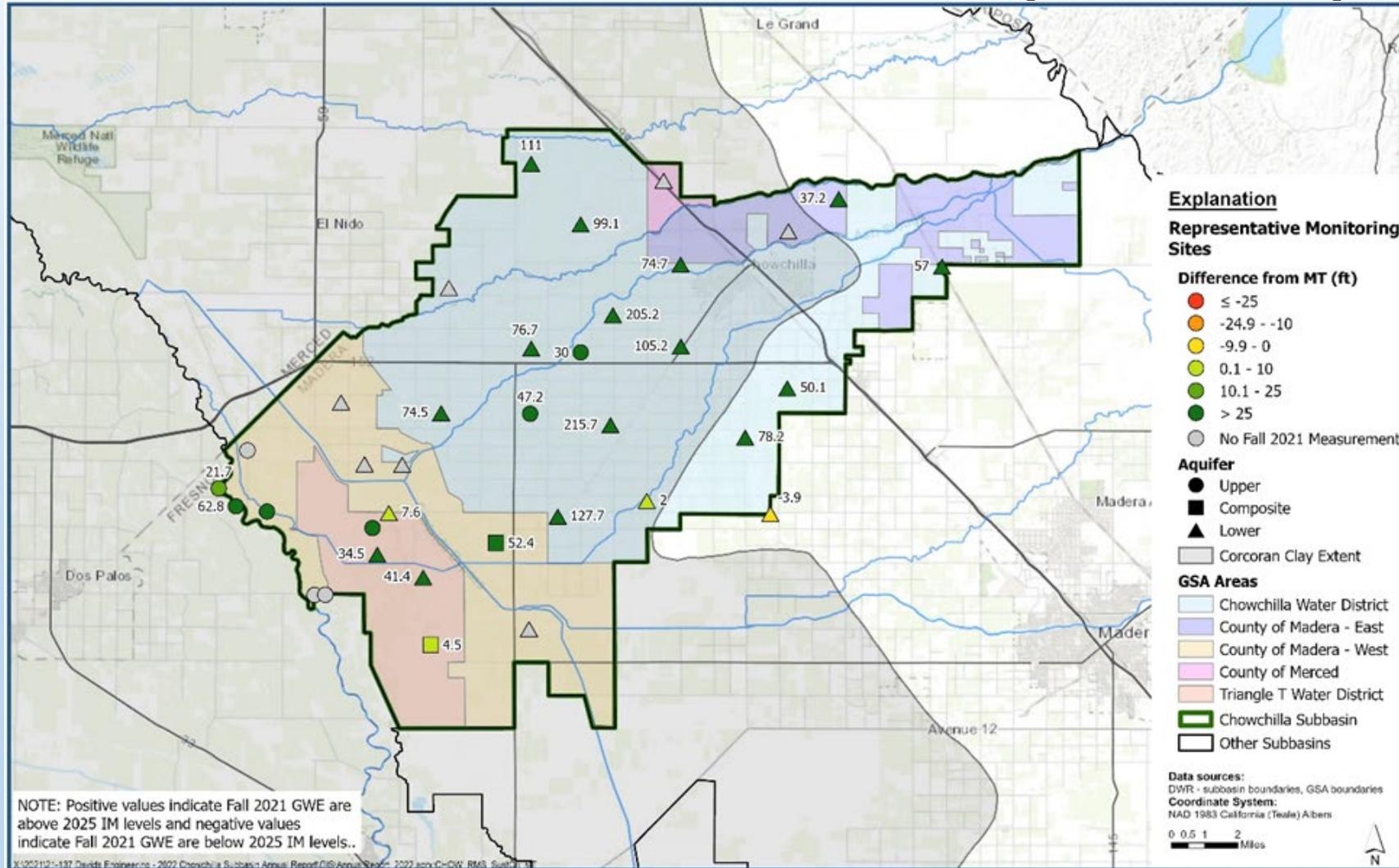
Spring 2020-2021 GW Storage Change – Lower Aquifer

Groundwater Conditions (Cont.....)



Fall 2021 Water Level Comparison to 2025 IMs

Groundwater Conditions (Cont.....)



Fall 2021 Water Level Comparison to MTs

Questions